BIOLOGY NMDCAT

EVOLUTION

Q.1 It is the product of evolution:
A. Ecosystem
B. Community
C. Biome
D. Species

Q.2 All of the following are related to evolution except:
A. Change over time
B. Muscle hypertrophy
C. Antibiotic resistance in bacteria
D. Origin of new species

Q.3 It provides the raw material for organic evolution:
A. Asexual reproduction
B. Mutation
C. Nutritive substances
D. Effect of hormones

Q.4 Diversity between living organisms is due to:
A. Climate
B. Gradual changes
C. Long term evolutionary change
D. Short term evolutionary change

Q.5 Which is not related to the idea of use and disuse of organs?
A. Extensively used body parts become longer
B. Disused body parts deteriorated
C. Bigger bicep of black smith
D. Different type of beaks present in finches

Q.6 According to Lamarck, extension of neck in giraffe was a result of:
A. Mutation
B. Environmental change
C. Natural selection
D. Genetic drift

Q.7 Darwin's finches discovered from the Galapagos Island serve as a good example of:
A. Mimicry
B. Molecular evidence of evolution
C. Seasonal migration
D. Biogeographical evidence of evolution

Q.8 Example of vestigial organs in the human body are:
A. Wisdom tooth, coccyx, vermiform appendix, nail, thymus
B. Coccyx, wisdom tooth, vermiform appendix, auricular muscles
C. Coccyx, vermiform appendix, wisdom tooth, pancreas
D. Auricular muscles, coccyx, retina, wisdom tooth, hypothalamus

Q.9 *Archaeopteryx* is a connecting link between:
A. Reptile and birds
B. Fish and amphibians
C. Birds and mammals
D. Amphibians and birds

Q.10 The theory of use and disuse of organs was given by:
A. Lamarck
B. Darwin
C. Weismann
D. Hugo de Varies

Q.11 Natural selection theory was proposed by Darwin along with:
A. Wallace
B. Mendel
C. Morgan
D. Lamarck

Q.12 The main point of Darwin's theory is:
A. Variation
B. Mutation
C. Enormous fertility
D. Natural selection

Q.13 Which of the following is not a part of Darwin's theory of evolution?
A. Genetic drift
B. Natural selection
C. Survival of the fittest
D. Struggle for existence

Q.14 Survival of fittest is possible due to:
A. Overproduction
B. Favorable variations
C. Environmental changes
D. Inheritance of acquired characters

Q.15 In which case is Darwin's theory wrong?
A. Arrival of fittest
B. Survival of fittest
C. Origin of species
D. High efficiency of reproduction

Q.16 Oldest fossils are of:
A. Bacteria
B. Dinosaur
C. Horse
D. Fishes

Q.17 Which of following structure is common in all vertebrates at embryonic stages:
A. Gill pouches
B. Four chambered heart
C. Teeth
D. Lungs

Q.18 Cytochrome 'C' is found in:
A. All organisms
B. All aerobic specie
C. All anaerobic species
D. All photosynthetic species

Q.19 According to Darwin, the prime cause of evolution is:
A. Artificial selection
B. Inheritance of acquired characters
C. Use and disuse of organs
D. Overproduction

Q.20 Which one is related to natural selection?

	No. of People	**Resources**	**Competition**
A.	More	More	No
B.	More	Less	More
C.	Less	More	No
D.	Less	Less	No

Q.21 Darwin believed in perceived unity of life. It means that:
A. All organisms descent from some common ancestor lived in remote past
B. All organisms descent from different ancestors lived in remote past
C. All organisms have same genetic make up
D. All organisms can produce same number of offsprings during their life

Q.22 In Darwin's hypothetical evolutionary tree, tips of living twigs represent:
A. Common physiological features
B. Ancestral history
C. Current Biodiversity
D. Total number of organisms of all species

Q.23 According to Darwin, ___________ become better adapted to local environment through natural selection.
A. Regional community
B. Ecosystem
C. Population
D. Individual

Q.24 The most obvious visual evidences for evolution are:
A. Fossil records
B. Comparative anatomy
C. Molecular Biology
D. Comparative embryology

Q.25 Which of the following will lead to a gradual change in population leading to evolution?
A. Equal ability of individuals to reproduce only
B. Equal ability of individuals to survive and reproduce
C. Unequal ability of individuals to survive and reproduce
D. Unequal ability of individuals to reproduce only

Q.26 Arms, wings, flippers and forelegs of different mammals are variations on common anatomical theme present:
A. Convergent evolution
B. Organic evolution
C. Divergent evolution
D. Speciation

Q.27 Process that has transformed life on earth from earliest to diverse forms collectively constitute:
A. Biodiversity
B. Phyletic lineage
C. Mutation
D. Evolution

Q.28 The belief that the origin of life and diversity of life from the act of God is called:
A. Mutation
B. Evolution
C. Special creation
D. Uniformitarianism

Q.29 Eukaryotes are thought to have first appeared about____________ billion years ago:
A. 1.5
B. 2.5
C. 3.5
D. 4.5

Q.30 According to endosymbiont hypothesis, the aerobic bacteria developed into:
A. Ribosomes
B. Lysosomes
C. Mitochondria
D. Golgi apparatus/comp

Q.31 Endosymbiont hypothesis explains the origin of:
A. Prokaryotes
B. Eukaryotes
C. Armadillos
D. Frogs

Q.32 The first comprehensive model that attempted to explain how life evolved was:
A. Theory of natural selection
B. Theory of special creation
C. Theory of inheritance of acquired characters
D. Hardy — Weinberg theorem

Q.33 Theory of Natural Selection dwells on:
A. Role of environment in evolution
B. Natural selection acting on favourable variations
C. Changes in gene complex resulting in heritable variations
D. None of the above

Q.34 Loss of limbs in snakes is the result of crawling and concealing habit and it is an example of:

A. Mutation B. Use of organs
C. Disuse of organs D. Behavioral modifications

Q.35 Lamarck was a Mendel's:

A. Successor B. Subordinate
C. Predecessor D. Contemporary

Q.36 Pick up the incorrect point of Lamarck theory:

A. Those parts of body used extensively become larger and stronger
B. Organs that are not used deteriorate
C. Modification acquired in body can be passed to offsprings
D. Modification acquired in body cannot be passed to offsprings

Q.37 About evolution according to Lamarck, blacksmith developing a bigger biceps in the arm is an example of:

A. Issue of organs B. Use of organs
C. Special creation D. Inheritance of acquired characters

Q.38 According to Lamarckism, new structures can appear in the body only when:

A. There is a desire to change
B. There is a change in environment
C. There is a mutation
D. There is a change in environment and mutation

Q.39 It is a demerit of Lamarck theory of evolution:

A. Organs used more may increase in size B. Acquired characters can be inherited
C. Organs not used mat deteriorate D. Acquired characters cannot be inherited

Q.40 According to Darwinism, the major force behind speciation is:

A. Mutations B. Genetic drift
C. Natural selection D. Migration

Q.41 _____________ also called the modern evolutionary synthesis:

A. Lamarckism B. Darwinism
C. Neo-Darwinism D. Evolution

Q.42 At Galapagos Islands, Darwin studied:

A. Finches B. Fishes
C. Pigeons D. Rabbits

Q.43 'Origin of Species' was written by:

A. Oparin C. Weismann
B. Lamarck D. Darwin

Q.44 Main points of Darwin's theory of evolution are:

A. Origin of species, decant with modification
B. Natural selection, adaptation
C. Decant with modification. natural selection and
D. Struggle for existence, evolution

Q.45 The term survival of fittest was introduced by:

A. Darwin B. Lamarck
C. Linnaeus D. Aristotle

Q.46 The ship used by Darwin on his expedition was:

A. Beadle B. Beagle
C. Nobel D. Beable

Q.47 The reappraisal of the theory of natural selection in terms of modern population genetics is sometimes called:

A. Darwinism B. Lamarckism
C. Neo-Darwinism D. Survival of the fittest

Q.48 Darwin's theory was mainly based on the evidence from:

A. Geographical distribution of species
B. Comparative anatomy
C. Fossil record
D. Geographical distribution of species and fossil record

Q.49 Which one of the following describes correctly the homologous structures?

A. Organs with anatomical similarities, but performing different functions
B. Organs with anatomical dissimilarities, but performing same function
C. Organs that have no function now, but had an important function in ancestor
D. Organs appearing only in embryonic stage and disappearing later in the adult

Q.50 Which one of the following is considered as advance evidence of evolution?
A. Embryology record
B. Molecular record
C. Biochemical record
D. Fossil record

Q.51 Which one of the following is the correct group of vestigial organs in man?
A. Nictitating membrane of eye, appendix, coccyx and mammary glands of male
B. Eyelids, appendix, coccyx and mammary glands of male
C. Nictitating membrane of eye, appendix, coccyx and elbow joint
D. Nictitating membrane of eye, appendix, wisdom tooth and mammary glands of male

Q.52 Which one of the following pairs represent analogous features?
A. Mammal forelimb and bird wings
B. Reptilian heart and mammalian heart
C. Insect wings and bat wings
D. Elephant tusks and human incisors

Q.53 Important evidence in favour of organic evolution is the occurrence of:
A. Homologous and analogous organs
B. Homologous and vestigial organs
C. Analogous and vestigial organs
D. Homologous organs

Q.54 Similarity in characteristics resulting from common ancestry is known as:
A. Analogy
B. Phylology
C. Homology
D. Evolutionary relationship

Q.55 Most fossils are found in:
A. Igneous rocks
B. Sedimentary rocks
C. Marine water
D. Clay

Q.56 Which of the following organs serve no apparent purpose?
A. Vestigial organs
B. Non vestigial organs
C. Homologous organs
D. Analogous organs

Q.57 From evolutionary point of view, which respiratory protein is common in many organisms?
A. Cytochrome a
B. Cytochrome b
C. Cytochrome c
D. Cytochrome d

Q.58 It is considered as strong evidence of evolution:
A. Fossil record
B. Comparative embryology
C. Biogeography
D. Comparative anatomy

Q.59 Which of the following are homologous organs?
A. Wings of bird and locust
B. Wings of bird and pectoral fins of fish
C. Wings of bat and butterfly
D. Legs of frog and cockroach

Q.60 The homologous organs are those that show similarity in:
A. Appearance
B. Origin
C. Function
D. Size

Q.61 Recapitulation theory of Von Baer is also called:
A. Biogenetic Law of Hackle
B. Hardy Weinberg theorem
C. Endosymbiotic hypothesis
D. Weismann' s theory

Q.62 The structures which are reduced during the course of evolution and have no apparent functions are called:
A. Regenerated organs
B. Salutatory organs
C. Vestigial organs
D. Useless organs

Q.63 Pick correct history of vertebrate decent from given chronological sequence of fossils:
A. Fishes → Amphibians → Reptiles → Birds and Mammal
B. Amphibians → Fishes → Reptiles → Birds and Mammal
C. Birds and Mammals → Reptiles → Fishes → Amphibians
D. Reptiles → Fishes → Amphibians → Birds and Mammals

Q.64 Homologous structures show __________evolution:
A. Convergent
B. Divergent
C. Parallel
D. Independent

Q.65 Similarity in characteristics resulting from different ancestry is known as:
A. Homology
B. Analogy
C. Ethology
D. Embryology

Q.66 Evolutionists believe that first living being on earth belong to a group of:
A. Eukaryotes
B. Plants
C. Protists
D. Prokaryotes

Q.67 Which one of the following was absent in the atmosphere at the time of origin of life?
A. Hydrogen
B. Ammonia
C. Methane
D. Oxygen

Q.68 The primitive earth's atmosphere has very little nutrients and first prokaryotes were:
A. Photosynthetic autotrophs
B. Absorptive chemotrophs
C. Absorptive heterotrophs
D. Chemosynthetic heterotrophs

Q.69 Initial environment of the earth was:
A. Reducing
B. Oxidising
C. Drying
D. Hygroscoptc

Q.70 Pick up the correct sequence of events in origin of species according to Darwin theory:
A. Struggle for existence → Variations and their inheritance → Survival of the fittest → Natural Selection
B. Natural Selection → Variations and their inheritance → Survival of the fittest → Struggle for existence
C. Struggle for existence → Natural Selection → Survival of the fittest → Variations and their inheritance
D. Struggle for existence → Variations and their inheritance → Natural Selection → Survival of the fittest

Q.71 The deepest strata of the earth contain fossils that
A. Old and complex
B. Old and simple
C. Young and complex
D. Young and simple

Q.72 According to Charles Darwin, Evolution results from accumulation of variations which are:
A. Gradual and non-heritable
B. Gradual and heritable
C. Sudden and non-heritable
D. Sudden and heritable

Q.73 The evolution of ____________ provides an example of history of vertebrate descent:
A. Sheep
B. Horse
C. Fish
D. Dinosaur

Q.74 Strongest support to organic evolution comes from the study of:
A. Embryology
B. Taxonomy
C. Fossils
D. Comparative anatomy

Q.75 ____________ are historical remnants of structures that had important functions in ancestors but are no longer essential presently:
A. Homologous organs
B. Analogous organs
C. Vestigial organs
D. Functional organs

Q.76 Fossils are either the actual or traces of organisms that lived in:
A. Present time
B. Ancient geological time
C. Recent geological time
D. Past geological time

Q.77 Scientist who first argued evolution with evidence was:
A. Aristotle
B. Darwin
C. Mendel
D. Lamarck

Q.78 The supporters of special creation are called ______________ while the supporters of evolution are called____________
A. Evolutionists. creationists
B. Creationists, evolutionists
C. Archeologists, evolutionists
D. Creationists, archeologists

Q.79 The change in genetic composition of population from generation to generation is called:
A. Mutation
B. Evolution
C. Phyletic lineage
D. Biodiversity

Q.80 Concept of evolution was first presented by:
A. Aristotle
B. Lamarck
C. Darwin
D. Wallace

Q.81 All of the following are cited by Lamarck to illustrate and support his evolution theory, EXCEPT:
A. Evolution of Kiwi
B. Evolution of foot of modern horse
C. Evolution of neck and forelimbs of Giraffe
D. Evolution of gain of teeth in whale

Q.82 According to concept of hereditary the modifications an organism acquires during its lifetime can be passed along to its offspring:
A. Lamarck
B. Darwin
C. Linnaeus
D. Malthus

Q.83 Theory of inheritance of acquired characters was given by:

A. Wallace B. Darwin
C. Lamarck D. De Vries

Q.84 The theory of use and disuse of organs was given by:

A. Aristotle B. Darwin
C. Lamarck D. Mendel

Q.85 Which of the following theories of evolution can best explain vestigial organs?

A. Lamarckism B. Darwinism
C. Natural selection D. Special creation

Q.86 Struggle for survival is consequence of:

A. Natural selection B. Over production
C. Genetic variation D. Extinction

Q.87 If a man were to obtain huge muscles from lifting weights in a gym on a regular basis, which scientist would say that the offspring of this man would be born with large muscles?

A. Lamarck B. Darwin
C. Sanger D. Mendel

Q.88 Which one of the following scientist's name is correctly match with the theory put forth by him?

A. George Cuvier: Inheritance of acquired characteristics
B. Charles Darwin: Origin of species by natural selection
C. Jean Baptiste de Lamarck: Catastrophes
D. De Varies: Natural selection

Q.89 Who believed in perceived unity in life?

A. Lamarck B. Darwin
C. Mendel D. Aristotle

Q.90 The diversity in the type of beaks of finches adapted to different feeding habits on the Galapagos Island, as observed by Darwin, provides evidence for:

A. Intraspecific competition B. Interspecific competition
C. Origin of species by natural selection D. Intraspecific variations

Q.91 The finches of Galapagos islands provide evidence in favour of:

A. Evolution due to mutation B. Retrogressive evolution
C. Biogeographical evolution D. Special creation

Q.92 Who figured out the mechanics of evolution known as natural selection?

A. Lamarck B. Alfred Wallace
C. Charles Darwin D. Cuvier

Q.93 Darwin's theory of natural selection was based on the following observation:

A. Over production
B. Evolution of new species
C. Struggle for existence
D. Over production, Evolution of new species and struggle for existence

Q.94 ___________ thought that all organisms fit into an orderly scheme, later called the Scala Naturae or Ladder of Nature:

A. Aristotle B. Darwin
C. Lamarck D. Lyell

Q.95 In Darwin perception of evolutionary tree ancestors are present at __________ and decedents at __________of tree:

A. Fork, tips of twigs B. Tips of twigs, fork
C. Stem, Tips of twigs D. Main trunk, roots

Q.96 The greatest weakness (demerit) in Darwinism was its failure to explain the cause of:

A. Variations B. Struggle for existence
C. Over production D. Survival for fittest

Q.97 The major feature Darwin noticed that differences among species of Galapagos finches

A. Beak color B. Beak shape
C. Length of tail feathers D. Coloration

Q.98 The word "evolution" refers to the:

A. Gradual development of something B. Gradual degradation of something
C. Progressive degradation of something D. Retrogressive degradation of something

Q.99 ____________ took a position as a naturalist aboard the HMS Beagle and made trip around the world:
A. Lamarck
B. Darwin
C. Mendel
D. Linnaeus

Q.100 The earliest fossil form, in the phylogeny of horse is:
A. Epihlppus
B. Eohippus
C. Parahippus
D. Merychippus

Q.101 Neo-Darwinism is based upon ideas from following disciplines, EXCEPT:
A. Biogeography
B. Palaentology
C. Taxonomy
D. Molecular biology

Q.102 The example of molecular relation between all living beings is a common:
A. Skeletal framework
C. Genetic code
B. Mode of locomotion
D. Tissue types

Q.103 Wings of birds, wings of butterfly and that of flying lizard have:
A. Same structures and same functions
B. Same structures and different functions
C. Different structures and same functions
D. Different structures and different functions

Q.104 These are the remains of species that were ancestors of modern species:
A. Vestigial organs
C. Analogous organs
B. Homologous organs
D. Fossils

Q.105 The greatest set back to Lamarckism was __________of germinal continuity:
A. Darwin' s theory
B. Uniformitarianism's theory
C. Weismann's theory
D. Malthus's theory

Q.106 Which evidence of evolution is related to Darwin's finches?
A. Evidences from biogeographical distribution
B. Evidences from comparative anatomy
C. Evidences from embryology
D. Evidences from paleontology

Q.107 Evolutionary relationships among species are reflected in their.
A. DNA and RNA
B. RNA and proteins
C. DNA and proteins
D. Carbohydrates and proteins

Q.108 Archaebacteria can survive at:
A. 100 °C
B. 120 °C
C. 150 °C
D. 200 °C

Q.109 Homologous organs show:
A. Parallel evolution
B. Divergent evolution
C. Convergent evolution
D. Adaptive evolution

Q.110 Which of the following structures is homologues to the wing of a bird?
A. Hindlimbs of rabbit
B. Flipper of whale
C. Dorsal fin of shark
D. Wings of moth

Q.111 Convergent evolution leads to:
A. Rudimentary organs
B. Analogous organs
C. Homologous organs
D. Vestigial organs

Q.112 The comparative embryology of all vertebrates shows development of:
A. Hairs
B. Scales
C. Gill pouches
D. Fins

Q.113 The theory that explains evolution of mitochondria and chloroplast on the basis of two separate mutually beneficial invasions of prokaryotic cells is called:
A. Catastrophism theory
B. Recapitulation theory
C. Membrane invagination theory
D. Endosymbiotic theory

Q.114 The oldest known fossils are of:
A. Plants
B. Archeobacteria
C. Eubacteria
D. Fishes

Q.115 Structures found in different species which are believed to have a common evolutionary origin
A. Homologous
B. Analogous
C. Vestigial
D. Fossilized

Q.116 All organisms share the same genetic code. This commonality is evident that:
A. Evolution is occurring now
B. Convergent evolution has occurred
C. All organisms are descended from a common ancestor
D. Evolution occurs gradually

Q.117 Pick the vestigial organ in whale:
A. Pelvis
B. Flipper
C. Nictitating membrane
D. Coccyx

Q.118 The first photosynthetic organisms probably used as source of hydrogen for reducing carbon dioxide to sugar.
A. H_2O
B. H_2S
C. HCl
D. CO_2

Q.119 These provide a visual record in a complete series showing the evolution of an organism:
A. Fossils
B. Vestigial structures
C. Geographic distribution
D. Rudimentary structures

Q.120 According to big bang theory the life began on earth about________ years ago:
A. 3.5 million
B. 3.5 billion
C. 2.5 billion
D. 1.5 million

Q.121 Neo Darwinism is based upon ideas from all of the followings, EXCEPT:
A. Biogeography
B. Taxonomy
C. Palaeontology
D. Molecular biology

Q.122 Flagella might have arisen through the ingestion of prokaryotes similar to:
A. Spirochetes
B. Archaebacteria
C. Cyanobacteria
D. Mycoplasma

Q.123 He was in charge of invertebrate collection at the Natural History Museum in Paris:
A. Malthus
B. Darwin
C. Mendel
D. Lamarck

Q.124 Which of the following first suggested the idea of evolution to Darwin?
A. Molecular biology
B. Fossil record
C. Biogeography
D. Comparative anatomy

Q.125 Darwin's theory as presented in "The origin of Species" mainly concerned:
A. How new species arise
B. How adaptive evolve
C. The origin of life
D. How extinction occur

Q.126 Fossils are remnants of:
A. Extinct organism
B. Extant organisms
C. Present organisms
D. Recent past organisms

Q.127 Charles Darwin was born in:
A. Cantbury
B. Shrewsbury in western England
C. Eastern England
D. Cantbury in Eastern England

Q.128 Darwin joined the expedition on Beagle to:
A. North American coastline
B. South African coastline
C. South American coastline
D. North African coastline

Q.129 Darwin observed and collected thousands of specimens of diverse:
A. Fauna of South America
B. Fauna and flora of South America
C. Flora of South America
D. Fauna and flora of North America

Q.130 Most of the animal species on Galapagos:
A. Live nowhere else in the continents
B. Live nowhere else in the world
C. Live everywhere in the world
D. Live everywhere else in the continent

Q.131 Pick up the one not true about the finches collected by Darwin on the Galapagos:
A. Although quite different seemed to be of same species
B. Although quite similar, seemed to be different species
C. Separated from original habitats by geographical barriers
D. Some were unique to individual islands

Q.132 Out of the 13 types of finches collected by Darwin from Galapagos:
A. All were unique to individual islands
B. Some were distributed on two or more islands
C. Some were unique to individual islands
D. Majority were unique to individual islands

SKN

Q.133 The history of life is like a tree, with multiple branching and rebranching from a common trunk, in view of:

A. Darwin C. Lamarck
B. Cuvier D. Lyell

Q.134 In Darwinian view, at each fork of evolutionary tree is an ancestor common to all lines branching from that:

A. Tree C. Stem
B. Trunk D. Fork

Q.135 Darwin suggested that populations of individual species become better adapted to their local environments through:

A. Artificial selection B. Adaptation
C. Variation D. Natural selection

Q.136 Those individuals whose hereditary characteristics fit them best to their environment are likely to leave ________ than the less fit individuals:

A. More offspring C. No offspring
B. Less offspring D. All offspring

Q.137 The unequal ability of individuals to survive and reproduce will lead to gradual change in a population, with favorable characteristics accumulating over the generations, thus leading to the:

A. Struggle for existence B. Evolution of new species
C. Overpopulation D. Persistence of species

Q.138 An important turning point for evolutionary theory was the birth of population genetics, which emphasizes the extensive genetic variation within populations and recognizes the importance of:

A. Qualitative characters B. Analytical characters
C. Quantitative characters D. Morphological characters

Q.139 With progress in population genetics Mendelism and Darwinism were reconciled and the genetic basis of ___and _____ was worked out:

A. Variation, artificial selection B. Overpopulation, natural selection
C. Variation, evolution D. Variation, natural selection

Q.140 By the reconciliation of Mendelism and Darwinism, a comprehensive theory evolution was developed, that became be known as:

A. Modern synthesis B. Modern Darwinism
C. Neo synthesis D. Modern synthesis or Neo Darwinism

Q.141 In "Modern Synthesis" or "Neo Darwinism" the word synthesis depicts

A. Origin of discoveries and ideas B. Integration of discoveries and ideas
C. Modification of discoveries and ideas D. Confirmation of discoveries and ideas

Q.142 Evolution leaves:

A. No signs B. Observable signs
C. Non-observable signs D. Visible signs

Q.143 Darwin's theory of evolution was mainly based on the evidence from the:

A. Geographical distribution of species
B. Fossil record
C. Population genetics
D. Geographical distribution of species and fossil record

Q.144 A mammal that lives only in America

A. Armadillo B. Tasmanian Wolf
C. Kangaroo D. Indus Dolphin

Q.145 The evolutionary view of biogeography predicts that contemporary armadillos are modified descendants of earlier species that occupied:

A. Distant continents B. Neighboring continents
C. Other continents D. These continents

Q.146 Most of the animal species on the ______ live no-where else in the world:

A. South America C. Cape Verde
B. North America D. Galapagos

Q.147 It provides a visual record in a complete series showing the evolution of an organism:

A. Biogeography B. The fossil record
C. Comparative anatomy D. Molecular biology

Q.148 A respiratory protein found in all aerobic species is:

A. Plastocyanin B. Cytochrome C
C. Cytochrome f D. Ferredoxine

Q.149 Main points of Darwin's theory of evolution are:
A. Origin of species, decent with modification
B. Natural selection, adaptation
C. Struggle for existence, evolution
D. Decent with modification, natural selection and adaptation

Q.150 Origin of species by Natural Selection included all, EXCEPT:
A. Decent with modification
B. Struggle for existence
C. Survival of the fittest
D. Mutation

Q.151 The deepest strata of the earth contain fossils that are:
A. Young and simple
B. Old and complex
C. Young and complex
D. Old and simple

Q.152 Darwin's theory as presented in "The origin of Species" mainly concerned:
A. How new species arise
B. How adaptations evolve
C. The origin of life
D. The genetics of evolution

Q.153 The theory that explains evolution of mitochondria and chloroplast on the basis of two separate mutually beneficial invasions of prokaryotic cells is called:
A. Catastrophism
B. Recapitulation
C. Membrane invagination
D. Endosymbiotic theory

Q.154 Study of fishes called:
A. Orinthology
C. Ichthylogy
B. Entomology
D. Herpetology

Q.155 Which one of the following is not true about membrane enfolding hypothesis?
A. Formation of endomembrane system
B. Membrane modification
C. Second membrane for protochloroplast
D. Second membrane dissolve

Q.156 _________ hypothesized that organism evolved through the inheritance of acquired characteristics:
A. Darwin
C. Aristotle
B. Lamarck
D. Wallace

Q.157 ________ was the first person who argued for evolution with evidence:
A. Lamarck
C. Aristotle
B. Darwin
D. Malthus

Q.158 _______ believed in theory of special creation:
A. Lamarck
C. Linnaeus
B. Darwin
D. Lyell

Q.159 Neo-Darwinism has integrated ideas and discoveries from:
A. Genetics
B. Biochemistry
C. Paleontology
D. All above are correct

Q.160 ________ means similarity due to shared development:
A. Analogy
C. Paleontology
B. Homology
D. Genetics

Q.161 ________ provides a visual record in a complete series showing the evolution of an organism:
A. Molecular biology
B. Biogeography
C. The fossil record/paleontology
D. Biochemistry

Q.162 Descent with modification is:
A. Phyletic lineage
C. Mutation
B. Evolution
D. Biodiversity

Q.163 Which one of the following pairs represents analogous features?
A. Insects wings and bat's wings
B. Forelimb of mole and bird's wings
C. Forelimb of man and bat's wings
D. Forelimb of man and horse

Q.164 Most fossils are found in:
A. Water
B. Sedimentary rocks
C. Igneous rocks
D. Metamorphic rocks

Q.165 Homologous structures show ________ evolution:
A. Parallel
C. Divergent
B. Convergent
D. Adaptive

Q.166 Analogous organs provide evidence for ______ evolution:
A. Convergent
C. Parallel
B. Divergent
D. Adaptive

Q.167 Forelimbs of human, cat's paw and front flipper of whale are examples of:
A. Rudimentary organs B. Analogous organs
C. Homologous organs D. Vestigial organs

Q.168 Archaeopteryx possessed both ______ as well as ______ characters:
A. Reptilian, amphibians B. Reptilian, avain
C. Fishes, avain D. Mammalian, avain

Q.169 ________ are the remains of members of species that are ancestors to modern species:
A. Population B. Fossils
C. Vestigial organs D. Homologous organs

Q.170 They show chronological appearance of the different classes of organisms:
A. Vestigial structures B. Fossils
C. Homologous structures D. Analogous structures

Q.171 The oldest known fossils are of:
A. Virus C. Plants
B. Bacteria D. Animals

Q.172 Who used the term "survival of the fittest"?
A. Lamarck C. Herbert Spencer
B. Darwin D. Aristotle

Q.173 The ancestors of giraffe were:
A. Camel-like B. Giraffe-like
C. Goat-like D. Horse-like
E. Sheep-like

Q.174 Which molecule is used in electron transport chain in all organisms?
A. 20 types of amino acids B. Cytochrome-c
C. Interons D. All of these

Q.175 Who pictured evolution as a "ladder of life" from simplest to the most complex animals?
A. Hardy-Weinberg B. Jean Batiste D. Lamarck
C. Charles Darwin D. Lynn Margulis

Q.176 Fires may kill large number of individuals unselectively, producing a small surviving population with different genotypic frequencies; phenomenon is known as:
A. Bottleneck effect B. Extinction
C. Founder effect D. Selection

Q.177 The ultimate source of variations would be:
A. Natural selection B. Use and disuse of organs
C. Mutations D. Sexual reproduction

Q.178 What is true about chronological sequence of vertebrate fossils?
I. The earliest vertebrates are amphibians.
II. Mammals originated from birds.
III. Amphibians followed by reptiles.
A. III only B. II only
C. I only
D. None of these is correct sequence of vertebrates.

Q.179 As per fossil record, the eukaryotes appeared:
A. 1.9 to 2.1 million years ago B. 1.9 to 2.1 billion years ago
C. 2.1 to 3.1 billion years ago D. None of these

Q.180 Convergent evolution can be represented by which of the following examples?
I. Wing of dragonfly, wing of bat
II. Wing of kiwi, wing of ostrich
III. Wing of mosquito, wing of grasshopper
A. I, II and III B. I only
C. III only D. II only

Q.181 What is true about endosymbiosis theory?
I. Anaerobic bacterium developed into a mitochondrion.
II. Aerobic bacterium developed into a mitochondrion.
III. Symbiotic photosynthetic bacterium developed into a mitochondrion.
A. I and III B. III only
C. II only D. I only

Q.182 According to Darwinism, what plays the role of breeder in natural selection?
A. Human being B. Environment
C. Finches D. All of these

Q.183 What is true about natural selection according to Neo-Darwinism?
I) Evolution operates through differential reproduction
II) Evolution operates through competition between organisms
III) Evolution operates through variations

A. II only
B. I, II and III
C. I only
D. III only

Q.184 Various evidences for evolution were presented in support of organic evolution; the strongest evidence(s) for evolution is/are:

A. Similar habitat
B. Similar body shape
C. Similar DNA sequence
D. Similar fossil
E. All of these

Q.185 Flightless birds have descended from the birds with well-developed wings; it can be explained through:

A. Homologous organs
B. Analogous organs
C. Acquired organs
D. Vestigial organs
E. Either A or B

Q.186 Which of the following components of the writings of Malthus indicates Darwin's postulate?

A. Mutation
B. Artificial selection
C. Struggle for existence
D. All of these

Q.187 A species living in different geographical areas is called as:

A. Sympatric species
B. Hybrid varieties
C. Parapatric species
D. Allopatric species

Q.188 With reference to evidence of evolution regarding biogeography, Darwin observed that:

A. Both South and North America lacked rabbits
B. North America lacked rabbits
C. Rabbits originated in South America
D. South America lacked rabbits

Q.189 Beagle spent how much time at Galapagos Islands?

A. 2 years
B. 2 months
C. 5 months
D. 5 years

Q.190 What is true about Beagle?

A. Darwin stayed at Galapagos islands for 5 years
B. Darwin toured in the ship for 5 years
C. Darwin collected finches at Galapagos islands for 5 years
D. None of these

Q.191 Trace out homologous organ.

Option	**Column-I**	**Column-II**
A.	Leg of a cat	Leg of a grasshopper
B.	Wing of an mosquito	Wing of a bat
C.	Arm of a human	Wing of a bird
D.	All of these	

Q.192 Which one of the following organs is a vestigial organ?

A. Vermiform appendix
B. Stomach
C. Intestinal villi
D. None of these

Q.193 How many theories that have been put forward about the mechanism of evolution of eukaryotes from prokaryotes?

A. 5 theories
B. 2 theories
C. 3 theories
D. 4 theories

Q.194 It is also known as survival of the fittest.

A. Speciation
B. Natural selection
C. Neo-Darwinism
D. Non-random mating
E. Artificial selection

Q.195 According to Lamarck, the characteristics which individual acquired during its life time were passed on to the offspring of that individual are known as:

A. Homologous characteristics
B. Acquired characteristics
C. Vestigial characteristics
D. Analogous characteristics

Q.196 All of the following ideas are not related to Darwinism, except:
A. All the cells arise from pre-existing cells.
B. None, all are related to Darwinism
C. In the struggle of existence, the fittest would survive.
D. Use and disuse of organs has important role in evolution.

Q.197 Darwin's mechanism of evolution by natural selection consists of ______ about natural world.
A. Two observations
B. Three observations
C. Four observations
D. Five observations
E. None of these

Q.198 On the Galapagos islands:
A. Darwin collected falcons
B. Darwin collected lung fishes
C. Darwin collected finches
D. All of these

Q.199 Chloroplasts are thought to be derived from:
I. Symbiotic anaerobic bacteria
II. Symbiotic chemosynthetic bacteria
III. Symbiotic photosynthetic bacteria
A. I only
B. II only
C. III only
D. I, II and III

Q.200 Evidence of prehistoric climates, habitats and animal distribution pattern was provided through:
A. Palaeontology
B. Ecosystem
C. Biogeography
D. Biology
E. Geography

Q.201 Find the set of homologous organs among following sets.
A. Leg of a dog, leg of a spider
B. Wing of an insect, wing of a bird
C. The arm of a human, wing of a bird
D. None of the above

Q.202 The most favorable combination of characteristics are most likely to survive and reproduce, passing their heritable traits on to the next generation. This part of Darwinism reflects:
A. Survival of the fittest
B. Origin of species
C. Overproduction
D. Inheritance of acquired characters

Q.203 Who was the fellow naturalist of Charles Darwin?
A. Alfred Russel Wallace
B. Thomas R Malthus
C. Charles Lyell
D. Lamrack

Q.204 All of the following are considered as vestigial structures except:
A. Ear muscles in dogs
B. Tail bones in monkeys
C. Nictitating membrane in pigeon
D. A, B and C are vestigial structures
E. None of these is correct

Q.205 Assume hardy-Weinberg equilibrium. What will be the genotype frequency of heterozygous if the frequency of two alleles of the genes is 0.2 and 0.8?
A. 0.16
B. 0.04
C. 0.32
D. 0.10
E. 0.64

Q.206 Almost all living organisms used the same basic molecules like:
A. ATP
B. Identical Enzymes
C. DNA
D. All of these are right choices

Q.207 The gene pool of a population may alter:
A. Due to genetic drift
B. Due to migration
C. Due to bottleneck
D. All of these

Q.208 Find the right statement(s) about the first step in the evolution of eukaryotic cell.
I. When a large anaerobic amoeboid prokaryote ingested a small aerobic bacterium.
II. When a large aerobic amoeboid prokaryote ingested a small anaerobic bacterium.
III. When a small anaerobic amoeboid prokaryote ingested a large aerobic bacterium.
A. III only
B. I, II and III are true
C. II only
D. I only

Q.209 Scientists assume vestiges as:
A. Analogous organs
B. Well-developed organs
C. Acquired organs
D. Retrogressive organs
E. Homologous organs

Q.210 The book "Origin of Species" was written by Charles Darwin; in which developed:
A. 4 main points
B. 5 main points
C. 3 main points
D. 2 main points

Q.211 According to evolutionists, what is the force that starts the process of evolution?
A. Variation
B. Mutation
C. Extinction
D. Adaptation

Q.212 With regard to amino acid sequence, the odd one among the following is:
A. Chimpanzee
B. Salamander
C. Horse
D. Goat
E. None of these

Q.213 Variations are the raw material of evolution to occur, according to Neo-Darwinism. Find the right choice.
I. Variations occur in gene pool of a population.
II. Variations occur in all the members of one species.
III. Variations occur in all the members of all species.
A. III only
B. II only
C. I only
D. I, II and III

Q.214 A housefly lays:
A. 120 eggs 6 times / winter
B. 120 eggs 6 times / summer
C. 120 eggs 3 times / summer
D. 120 eggs 2 times / summer

Q.215 According to evolution point of view, flagella may have derived through:
A. Ingestion of mitochondria
B. Ingestion of prokaryotes
C. Ingestion of cyanobacteria
D. All of these

Q.216 The type of speciation that occurs when populations of a species become geographically isolated; called as:
A. Allopatric speciation
B. Parapatric speciation
C. Sympatric speciation
D. None of these

Q.217 A long neck is possessed by present day giraffe as compared to its ancestors; Lamarck believed that it could be:
A. Due to natural selection
B. Due to inheritance of acquired characters
C. Due to isolation
D. Due to mutation

Q.218 According to evolution of horse:
I) Number of toes increased from three to five.
II) Number of toes reduced from five to two.
III) In modern horse the large central toe ends in a hoof.
IV) In modern horse the splint bones ends in a hoof.
A. III only
B. I only
C. II only
D. II and IV
E. II and III

Q.219 Who proposed endosymbiosis theory?
A. Jean Batiste D. Lamarck
B. Charles Darwin
C. Hardy-Weinberg
D. Lynn Margulis

Q.220 According to evolutionists, the reducing atmosphere slowly became oxidizing atmosphere, when:
A. Ozone layer was depleted
B. Oxygen layer was depleted
C. Ozone layer was built
D. Either A or B

Q.221 Archaeopteryx had:
A. Long tail with 10 vertebrae
B. Lived 150 billion years ago
C. No teeth
D. All of these
E. None of these

Q.222 The oldest known fossils are:
A. Archaeopteryx
B. Prokaryotes
C. Dinosaurs
D. Eukaryotes

Q.223 The process of formation of two or more descendant species from a single ancestral species all occupying the same geographic location is known as:
A. Allopatric speciation
B. Sympatric speciation
C. Parapatric speciation
D. All of these

Q.224 The major source of variations is:
A. Migration
B. Adaptation
C. Selection
D. Mutation

Q.225 According to evolutionists, the change from a reducing atmosphere to an oxidizing atmosphere also meant that:

A. Life could no longer arise biotically
B. Life could no longer arise abiotically as well as biotically
C. Life could no longer arise abiotically
D. None of these

Q.226 Evolutionists assume that _____ are regarded as the ancestors of all life.

A. Volvox
B. Cyanobacteria
C. Amoeba
D. Prokaryotes
E. All of these

Q.227 Darwinism is based on:

A. Natural selection
B. Use and disuse of organs
C. Mutation
D. All of these

Q.228 According to Darwin, organisms with variations:

I. Will be favoured over that are well-adapted in that environment.
II. Will be favoured over that are less adapted in that environment.
III. Will be favoured over that are less adapted in irrelevant environment.

A. III only
B. II only
C. I only
D. I, II and III

Q.229 According to Darwin, evolution occurs in small adaptive steps; it means:

A. Evolution occurs suddenly
B. Evolution proceeds gradually
C. Evolution proceeds intermittently
D. All of these

Q.230 The protective ozone layer had built up to make life on land possible:

A. About 420 million years ago
B. About 40 million years ago
C. About 420 billion years ago
D. About 42 billion years ago

Q.231 All of the following are the examples of a vestigial structures except:

A. None, as A.O.T are vestigial structures
B. Wings of kiwi
C. Forelimb of a whale
D. Splint bone of foot of horse

Q.232 Lamarck believed that:

A. Acquired characters are never inherited from generation to generation.
B. Analogous characters are inherited from generation to generation.
C. Homologous characters are inherited from generation to generation.
D. Both B and C
E. None of these

Q.233 Find out vestigial organ.

A. Vermiform appendix
B. Intestinal villi
C. Stomach
D. None of these

Q.234 The bones in the fore leg of a lizard and in the flipper of a whale, which are evolutionarily originated from their common ancestor, are:

A. Sympatric organs
B. Homologous organs
C. Analogous organs
D. Convergent organs
E. Either A or C

Q.235 The organs which are similar in function but differ in structure are known as:

A. Acquired organs
B. Functional organs
C. Analogous organs
D. Homologous organs
E. Vestigial organs

Q.236 The struggle for existence between the individual of similar species having similar necessities is:

A. Interspecific struggle
B. Environmental struggle
C. Symbiotic association
D. Intraspecific struggle

Q.237 The core of Darwinism is:

A. Artificial selection
B. Origin of species
C. Natural selection
D. Struggle for existence

Q.238 Which one the following situations can be interpreted by Lamarckism?

A. How giraffes acquired their long neck?
B. Why the beaks of Galapagos finches are of diverse types?
C. Both A and B
D. None of these

Q.239 Which one of the following is an example of convergent evolution?

A. Wing of hawk, the wing of hawksmoths
B. Teeth of domestic dog, teeth of a wolf
C. Wings of sparrow, wings of pigeon
D. All of the above

Q.240 Archaeopteryx is considered as connecting-link between:

A. Amphibians and reptiles
B. Birds and mammals
C. Invertebrates and invertebrates
D. Flightless and flying birds
E. Reptiles and birds

Q.241 In sudden flooding situation, only those organisms can swim or respire in water that have better survival chances and other die; it demonstrates Darwin's which observation?

A. Overproduction
B. Survival of the fittest
C. Struggle for existence
D. Origin of species

Q.242 Snakes which are living in small holes and crevices have lost their legs. It is related to:

A. Continuous disuse of organs
B. Continuous use of organs
C. Similar DNA sequence
D. Either A or B

Q.243 Key point of Lamarck view about organic evolution is that every offspring

A. Is similar to its parrents
B. Inherits characters acquired by the parental generation
C. Shows struggle for existence.
D. Repeats phylogeny in its ontogen

Q.244 Most primitive organism that originated on earth was

A. Archeobacteria
B. Eukaryotic bacteria
C. Eubacteria
D. Amoeba

Q.245 Lamarck's theory of evolution is known as

A. Natural selection
C. Survival of the fittest
B. Inheritance of acquired characters
D. Mutation theory

Q.246 With respect to nutrition, most primitive organism was

A. Autotroph
B. Chemoautotroph
C. Heterotroph
D. Absorptive heterotroph

Q.247 Which of the following concept is attributed to Charles Darwin?

A. Use and disuse of organs is of great importance in evolution.
B. Every cell must come from a pre-existing cell
C. In the struggle for existence, the fittest would survive
D. The gametes will carry only one of a pair of contrasting characters.

Q.248 Theory of natural selection was proposed by

A. Lamarck
B. Darwin
C. De Vries
D. Haeckel

Q.249 The first living being originated about years ago

A. 3.5 million
B. 420 million
C. 1.5 billion
D. 3.5 billion

Q.250 According to theory of natural selection, organisms produce

A. More offspring than supported
B. Less offspring than supported
C. Offspring according to resources available
D. Offspring to create resources

Q.251 The First photosynthetic organisms used as a source of hydrogen for reducing carbon dioxide to sugar

A. H_2
B. H_2S
C. H_2O
D. CH_4

Q.252 Organelle of symbiotic origin is

A. Ribosome.
B. Golgi Complex.
C. lysosome
D. Mitochondria

Q.253 According to endosymbiont hypothesis, which of the following is formed from cyanobacteria

A. Mitochondria
B. ER
C. Chloroplast
D. Golgi complex

Q.254 Which hypothesis explain origin of nucleus

A. Endosymbiont
B. Membrane invagination
C. Vent
D. Evolution

Q.255 This is most popular example of Lamarck

A. Primrose
B. African Giraffe
C. Snakes
D. Both B. and C.

Q.256 An organism that can synthesize all its required organic components from CO_2 using energy from the oxidation process is a:

A. Photoautotroph
B. Chemoautotroph
C. Photoheterotroph
D. Chemoheterotroph

SKN

Q.257 Which of the following explains origin of life on earth
A. Endosymbiont Hypothesis
B. Membrane invagination Hypothesis
C. Vent Hypothesis
D. Theory of natural selection

Q.258 According to evolutionists, all are present in early atmosphere except
A. Inorganic molecules
B. CO_2
C. Water Vapors
D. O_2

Q.259 Who stated this theory — organ in use will develop and if not used will weaken to turn vestigial?
A. Mendel
B. Darwin
C. De Vries
D. Lamarck

Q.260 The present giraffe has a long neck as compared to its ancestors. Lamarck believed it could be due to
A. Natural selection
B. Isolation
C. Inheritance of acquired characters
D. Struggle for survival

Q.261 First living being originated on earth in
A. Water
B. Dry Place
C. Cold water
D. Hot Water

Q.262 The idea of use and disuse of organs was given by
A. Lamarck
B. Darwin
C. Morgan
D. Hugo de Vries

Q.263 Lamarckism cannot explain
A. Webbed toes in aquatic Birds
B. Weak muscles in the son of a wrestler
C. Long narrow and limbless body of snakes
D. Use of organ

Q.264 According to Lamarck Neck and fore limbs in African giraffe increased in length as a result of:
A. Variation in these organs
B. Mutations in these organs
C. Use of organs
D. None of these

Q.265 According to Lamarck, Deterioration of organs is associated with
A. Natural selection
B. Descent with modification
C. Use of organs
D. Disuse of organs

Q.266 In early environment, Accumulation of oxygen in atmosphere is because of
A. Respiration
B. Photosynthesis
C. Chemiosmosis
D. Digestion

Q.267 __________ occurs because natural selection gives some alleles a better chance of survival than other
A. Crossing over
B. Deterioration
C. Artificial selection
D. Evolution

Q.268 Over production of offspring leads to _________
A. Competition for food
B. Competition for water
C. Competition for growing space
D. All of these

Q.269 Evolution operates on
A. Individual
B. Species
C. Population
D. Abiotic Components

Q.270 According to Lamarck, Long neck of giraffe is because of use of organs. According to Darwin neck of giraffe is because of
A. Use of organs
B. Descent with modification
C. Competition
D. DNA

Q.271 Which of the following concepts is attributed to Lamarck?
A. Struggle for existence
B. Survival of the fittest
C. Inheritance of acquired characters
D. Cells come from pre-existing cells

Q.272 The survival of an organism during struggle for existence is not random, but depends on
A. Its genetic constitution
B. Its ability to acquire characters
C. Its ability to over produce
D. Its ability to over eat

Q.273 Modern era scientists agree that life on earth came into being by:
A. Creation
B. Evolution
C. Sudden mutation
D. Revolution

Q.274 The one who believed in theory of special creation is:
A. C. Linnaeus
B. J.G. Mendel
C. J. D. Lamarck
D. C. Lyell

SKN

Q.275 In Lamarck's view, the key of organic evolution is that each progeny:
A. Shows struggle for existence
B. Characters acquired by parental generation are inherited
C. Is similar to its parents
D. Phylogeny is repeated in its ontogeny

Q.276 Origin of life is explained by all except:
A. Endosymbiont hypothesis
B. Creationism
C. Hydrothermal vent hypothesis
D. Chemical evolution

Q.277 About which of these did Darwin have a poor understanding?
A. Individuals exhibit variation
B. Much of the variation inherited
C. Individuals struggle for survival
D. Sources of genetic variation

Q.278 Which of this evolutionary agent is most consistent at causing populations to become better suited to their environments over the course of generations?
A. Mutation
B. Non-random mating
C. Gene flow
D. Natural selection

Q.279 Natural selection is most nearly the same as:
A. Diploidy
B. Gene flow
C. Genetic drift
D. Differential reproductive success

Q.280 The Darwinian fitness of an individual is measured directly by:
A. Number of its offspring that survive to reproduce
B. Number of 'good genes' it possesses
C. Number of mates it attracts
D. Physical strength

Q.281 Charles Darwin was the first person to propose that:
A. Evolution occurs
B. Mechanism of evolution occurs
C. Earth is older than a few thousand years
D. Mechanism for evolution with evidence

Q.282 Which of the following is not a vestigial organ in human body?
A. Wisdom teeth
B. Ear muscle
C. Appendix
D. Sacrum

Q.283 The animal species on the Galapagos resemble species living on the:
A. North American mainland
B. Great Britain
C. South American mainland
D. Northern Europe

Q.284 Production of more individuals than the environment can support leads to:
A. Struggle for existence
B. Natural selection
C. Survival of the fittest
D. Evolution

Q.285 In which rocks most fossils are found?
A. Metamorphic
B. Sedimentary
C. Igneous
D. Sand

Q.286 Which of the following are not the example of analogous structure?
A. Wings of bats and butterfly
B. Thorn and spine
C. Wings of bats and forelimb of cattle
D. Wings of bats and sparrow

Q.287 Which of the following branch first suggested the idea of evolution to Darwin?
A. Zoogeography
B. Phytogeography
C. Biogeography
D. Geography

Q.288 Which of the following animal lives only in America?
A. Kangaroo
B. White rat
C. Armadillos
D. American python

Q.289 According to molecular biology and cell biology, the ancestors of all life forms belongs to:
A. Protists
B. Eukaryotes
C. Prokaryotes
D. Fungus-like protists

Q.290 Oldest vertebrate fossils are of:
A. Dinosaur
B. Archaeopteryx
C. Fishes
D. Prokaryote

Q.291 Most appropriate group of mediums for fossilization is:
A. Sand, resin and ice
B. Rock, magma and ice
C. H_2O, dust and smoke
D. Resin, amber and air

Q.292 Almost same skeletal elements make up forelimbs of all except:
A. Humans
B. Bats
C. Cats
D. Silver fish

SKN

Q.293 Arms, wings, flippers and forelegs of different mammals are variations on common anatomical theme present:
A. Convergent evolution
B. Organic evolution
C. Divergent evolution
D. Speciation

Q.294 Comparative anatomy supports that evolution is a __________ process in which ancestral structures that functioned in one capacity become modified as they take on new function.
A. Continuous
B. Discontinuous
C. Remodeling
D. Complete

Q.295 What are fossils?
A. Dead remains of organisms
B. Traces of primitive organisms
C. Impression of former organisms
D. All A, B, C

Q.296 Evolutionary relationship among specie are reflected at molecular level in their:
A. DNA and protein
B. DNA and carbohydrates
C. DNA and lipids
D. DNA and RNA

Q.297 All of the following are related with Darwinism except:
A. Mutations
B. Survival of the fittest
C. Origin of species
D. Overproduction
E. All of these are related

Q.298 Among of the following pairs, the most distantly related to one another are:
A. Bats and Birds
B. Bears and whales
C. Globe fish and Dolphin
D. Salamander and snake
E. Sparrows and green turtl

Q.299 The random loss of allele from a population is called:
A. Gene flow
B. Genetic drift
C. Gene frequency
D. Gene pool
E. Mutation

Q.300 The dogs verities existing today has been descended from
A. Foxes
B. Lemurs
C. Cats
D. Wolves
E. All of these

Q.301 He was not vocal for the idea of evolution:
A. Aristotle
B. Lamarck
C. Linnaeus
D. Darwin

Q.302 It is not a vestigial organ in human body:
A. Sacrum
B. Ear muscles
C. Appendix
D. Wisdom tooth

Q.303 It is not true about evolution:
A. It is a slow and continuous process
B. Evolution doesn't leave observable signs
C. Evolution transforms life on earth
D. Evolutionary relationships among organisms are reflected in

Q.304 Forelimbs of man, horses and whales etc. are examples of:
A. Analogous organs
B. Divergent evolutionc
C. Chemical evolution
D. Convergent evolution

Q.305 "Evolution is a remodeling process", this is supported by:
A. Biogeography
B. Comparative physiology
C. Comparative anatomy
D. Molecular biology

Q.306 The most important requirement of evolution is:
A. Natural selection
B. Adaptation of acquired characteristics
C. Variations
D. Development methods

Q.307 The comparative embryology of all vertebrates shows presence of:
A. Hairs
B. Gill pouches
C. Scales
D. Fins

Q.308 Fossils are most likely to be present in:
A. Sedimentary rocks
B. Metamorphic rocks
C. Igneous rocks
D. Shower curtains

Q.309 Endosymbiont hypothesis does not explain evolution of:
A. Flagella
B. Vacuole
C. Chloroplast
D. Mitochondria

Q.310 Earliest organisms were:
A. Photoautotrophs B. Chemoheterotrophs
C. Parasites D. Heterotrophs

Q.311 Organisms that are relatively younger in evolutionary process than others:
A. Mammals B. Birds
C. Fishes D. Reptiles

Q.312 Animals evolved from:
A. Eubacteria B. Archeae
C. Protists D. Blue green algae

Q.313 Oldest known fossil among following would belong to:
A. Gram positive bacteria B. Helizoans
C. Cyanobacteria D. Purple bacteria

Q.314 First organism tried to create an oxidizing environment in evolutionary process is:
A. Blue –Green algae B. Escherichia coli
C. Bacillus subtilus D. Thermus aquaticus

Q.315 Closely related organisms go through similar stages in their embryonic development. This is called:
A. Theory of natural selection B. Theory of catastrophism
C. Theory of modern synthesis D. Theory of recapitulation

Q.316 Darwinism does not include:
A. Survival of fittest B. Descent with modification
C. Use and disuse of organ D. Natural selection & adaptation

Q.317 Which structures show convergent evolution?
A. Floral parts B. Forelimbs of cats and humans
C. Gill pouches D. Wings of bats and butterfly

Q.318 Neo-Darwinism is:
A. Darwinism + Lamarckism B. Darwinism + Mendelism
C. Darwinism + Haeckelism D. Lamarckism + Mendelism

Q.319 Bacteria preceded all eukaryotic life. This is supported by all except:
A. Biotechnology B. Biochemistry
C. Molecular biology D. Cell biology

Q.320 Strongest evidence of evolution is?
A. Molecular Biology B. Biogeography
C. Comparative anatomy D. Comparative embryology

Q.321 Series of changes in the genetic composition of a population over time is called:
A. Inorganic or abiotic evolution B. Organic or biological evolution
C. Ecological succession D. Ecological adaptation

Q.322 The unequal ability of individuals to survive and reproduce will lead to a/an:
A. Abrupt change in population B. Zigzag change in population
C. Rapid change in population D. Gradual change in population

Q.323 Darwin's theory of evolution was mainly based on the evidences from:
A. Population genetics and paleontology
B. Population genetics and molecular biology
C. Biogeography and paleontology
D. Biogeography and molecular biology

Q.324 The origin of species convinced most biologists that species are products of:
A. Variation B. Adaptation
C. Natural selection D. Evolution

Q.325 Evolution refers to the process that has transformed life on earth from its:
A. Earliest form to vast diversity B. Simple form to vast complexity
C. Primitive form to vast complexity D. Simple form to vast diversity

Q.326 The metaphor used by Darwin for history of life on earth was:
A. Ladder B. Pyramid
C. Tree D. Fork

Q.327 Genetic basis of variation and natural selection was worked out as a result of:
A. Reconciliation of uniformitarianiqm and Darwinism
B. Reconciliation of catastrophism and Danvinism
C. Reconciliation of Mendelism and Danvinism
D. Reconciliation of Lamarckism and Danvinism

Q.328 It was the geographical distribution of species, that first suggested the idea of evolution to:

A. Lamarck
B. Aristotle
C. Darwin
D. Linnaeus

Q.329 Darwin suggested that populations of individual species become better adapted to their local environments through:

A. Artificial selection
B. Adaptation
C. Variation
D. Natural selection

Q.330 Production of more individuals, than the environment can support leads to a:

A. Struggle for existence
B. Survival of the fittest
C. Organic evolution
D. Healthy population

Q.331 Survival in the struggle for existence is:

A. Always random
B. Always haphazard
C. Not random
D. Rarely random

Q.332 The individuals with hereditary characteristics that fit them best to their environment are:

A. Likely to leave more offspring
B. Likely to live longer
C. Likely to leave less offspring
D. Likely to live shorter

Q.333 Greater is the number of individuals in a population, more it will be resistant against:

A. Mutation
B. Migration
C. Genetic drift
D. Selection

Q.334 Following are the factors affecting gene frequency in a population, EXCEPT:

A. Mutation
B. Random mating
C. Genetic drift
D. Selection

Q.335 Hardy-Weinberg law is actually the law of:

A. Inevitability of evolution
B. Stoppage of evolution
C. Negation of evolution
D. Inevitability of equilibrium

Q.336 Who published the principles of Geology?

A. Darwin
B. Cuvier
C. Malthus
D. Lyell

Q.337 __________ become a focal point Darwin's __________ arguments for evolution:

A. Taxonomic system of Linnaeus
B. Taxonomic system of Whittaker
C. Lamarck' s theory of evolution
D. Aristotle's concept of evolution

Q.338 Theory of special creation is based on following factors, EXCEPT:

A. Inspiration
B. Meditation
C. Observation
D. Divine revelation

Q.339 Which one of the following theories interprets the mechanism of evolution of eukaryotes?

A. Neo-Darwinism
B. Darwinism
C. Endosymbiosis
D. Lamarckism

Q.340 Which one of the following phenotypic variations is not passed on by parents to their offspring?

A. Variation caused by mutation
B. Variation caused by environment
C. Variation caused by crossing over
D. Variation caused by independent assortment

Q.341 Following three factors cause variation by reshuffling alleles in the population, EXCEPT:

A. Independent assortment of chromosomes
B. Crossing over between chromosomes
C. Random mating between organisms
D. Mutation in genes or chromosomes

Q.342 Scientific truth to scientist is _______, but theological truth to believer is ________ :

A. Absolute, Tentative
B. Tentative, absolute
C. Absolute, debateable
D. Tentative, debateable

Q.343 Ancestors of all life forms on earth, according to evolutionists are:

A. Prokaryotes
B. Protists
C. Protozoaus
D. Plants

Q.344 Following are true about homologous structures, EXCEPT:

A. Similarity in structure
B. Similarity in function
C. Dissimilarity in structure
D. Dissimilarity in function

Q.345 Following are homologous structures, EXCEPT:

A. Forelimb of man
B. Forelimb of cat
C. Forelimb of bat
D. Pectoral fin of fish

Q.346 The wings of birds and insects provide a good example of:
A. Divergent evolution
B. Convergent evolution
C. Organic evolution
D. Inorganic evolution

Q.347 "Inheritance of acquired characters" was experimentally disproved by:
A. Charles Darwin
B. John Mendel
C. August Wiesman
D. J.B de Lamarck

Q.348 __________was contemporary of Darwin:
A. Alfred Russel Wallace
B. Gregor John Mendel
C. Jean Baptist de Lamarck
D. Thomas R. Malthus

Q.349 Who first proposed a mechanism of natural selection?
A. Alfred Russel Wallace
B. Jean Baptist de Lamarck
C. James Hutton
D. Charles Darwin

Q.350 The phrase "survival of the fittest" was coined by:
A. Charles Darwin
B. Herbert Spencer
C. Russel Wallace
D. J.B de Lamarck

Q.351 Lamarck was criticized in his days more for:
A. Presenting the idea of use and disuse of organs
B. Presenting the idea of inheritance of acquired characters
C. Advocating ideas of evolutionary change
D. Mechanism of evolution he proposed

Q.352 Who motivated the Darwin to published his book?
A. Lamarck
B. Lyell
C. Wallace
D. Hutton

Q.353 When Lamarck and Darwin put forward their ideas practically nothing was known about?
A. Evolution
B. Selection
C. Adaptation
D. Heredity

Q.354 Following are different physical barriers which restrict the distribution of a population from the centre of its origin, EXCEPT:
A. Ocean
B. Desert
C. Climate
D. Mountain

Q.355 Biogeographical studies show that species have restricted distribution from the centre of origin due to following types of factors, EXCEPT:
A. Physical
B. Genetic
C. Environmental
D. Ecological

Q.356 The science of discovery, identification and interpretation of fossils is called:
A. Palynology
B. Paleontology
C. Paleozoology
D. Evolution

Q.357 The earliest horses had:
A. One toe
B. Two toes
C. Three toes
D. Four toes

Q.358 Following are different vestigial structures of human body, EXCEPT:
A. Coccyx
B. Wisdom teeth
C. Vermiform appendix
D. Ears

Q.359 In our body there are about:
A. Four vestigial structures
B. Forty vestigial structures
C. Nine vestigial structures
D. Ninety vestigial structures

Q.360 By "Descent with modification" Darwin meant that:
A. More species are produced than environment can support
B. Individuals of a population struggle for existence
C. Survival in the struggle for existence is not random
D. Variation is an ongoing process in populations

Q.361 According to Darwin the cause of struggle for survival was:
A. The unequal ability of individuals to survive
B. Overproduction of the individuals
C. Survival of the fittest and natural selection
D. Descent with modification

Q.362 Mendelism and Darwinism were reconciled with the development of:
A. Molecular genetics
B. Population genetics
C. Biogeography
D. Paleontology

Q.363 A comprehensive theory of evolution based on ideas from different fields of biology was named as:

A. Lamarckism B. Darwinism
C. Neo-Darwinism D. Natural selection

Q.364 It is noteworthy to say that adaptations that an organism acquires by its action are:

A. Heritable B. Not heritable
C. Useful D. Not useful

Q.365 Evolution leaves:

A. No observable signs B. Observable signs
C. Qualitative signs D. Quantitative signs

Q.366 __________ supports that evolution is a remodeling process:

A. Biogeography B. Molecular biology
C. Comparative anatomy D. Comparative embryology

Q.367 The flower parts of flowering plants are:

A. Analogous B. Homologous
C. Uniform D. Undifferentiated

Q.368 The condition to stop natural selection may be:

A. The maintenance of infinite size of a population
B. Stoppage of migration and mutation
C. The equal ability of individuals to survive and reproduce
D. The unequal ability of individuals to survive and reproduce

Q.369 Population genetics is important for evolution because it emphasizes the:

A. Genetic uniformity B. Genetic variation
C. Genetic drift D. Genetic mutation

Q.370 Among the scientist who believed in Divine creation was:

A. Charles Darwin B. J.B de Lamarck
C. Carolus Linnaeus D. Russel Wallace

Q.371 Evidence of a common ancestor for all of life is reflected in the following factors, EXCEPT:

A. Universality of DNA as the genetic material
B. Universality of the genetic code
C. Universal mechanism of gene expression
D. Universality of cell wall composition

Q.372 Armadillo is also called as:

A. Terrestrial mammal B. Armored mammal
C. Aquatic mammal D. Marine mammals

Q.373 Darwin's mechanism of evolution by natural selection consists of________ observations about natural world:

A. Two B. Single
C. Three D. Four

Q.374 The process in which distantly related organisms independently evolve similar traits to adapt to similar necessities is called:

A. Convergent evolution B. Divergent evolution
C. Parallel evolution D. Retrogressive evolution

Q.375 It is inevitable for selection to operate:

A. Overproduction B. Variation
C. Struggle for existence D. Survival of the fittest

Q.376 ________ believed in perceived unity in life?

A. Lamarck B. Darwin
C. Aristotle D. Mendel

Q.377 A theory of evolution based on the principle that physical changes occurring in organisms during their lifetime could be transformed to their offspring is called:

A. Darwinism B. Neo Darwinism
C. Lamarckism D. Natural selection

Q.378 ___________ is considered to be evolved by divergent evolution:

A. Analogy B. Homology
C. Selection D. Mutation

Q.379 Gill pouches in vertebrates represent:

A. Convergent evolution B. Divergent evolution
C. Special evolution D. Co-evolution

Q.380 Change in the characteristics of a species over several generations is called:
A. Biodiversity
B. Phyletic lineage
C. Biological change
D. Evolution

Q.381 Following are examples of anatomical vestigiality in humans, EXCEPT:
A. Tail bone
B. Wisdom teeth
C. Nictitating membrane
D. Goose bumps

Q.382 ____________ is the only scientific explanation for diversity of life:
A. Genetic drift
B. Mutation
C. Migration
D. Evolution

Q.383 Endosymbiont hypothesis was proposed by:
A. Wallace
B. Lynn Margulis
C. Lamarck
D. Linnaeus

Q.384 Archaeobacteria can survive at temperature upto:
A. 150 °C
B. 300 °C
C. 120 °C
D. 200 °C

Q.385 Phyletic lineages are mostly based on:
A. The fossil record
B. Biogeography
C. Molecular biology
D. Comparative anatomy

Q.386 Jean Baptiste Lamarck (1744-1829) published his theory of evolution in 1809, the year:
A. Darwin was born
B. Darwin was compiling his theory
C. Darwin was died
D. Darwin was student

Q.387 One who believed on "The origin of species by natural selection" was:
A. Lamarck
B. Darwin
C. Linnaeus
D. Wallace

Q.388 first suggested the idea of evolution to Darwin:
A. Paleontology
B. Biogeography
C. Molecular biology
D. Embryology

Q.389 The evolutionary pattern in which species sharing a common ancestry become more distinct due to differential selection pressure is called:
A. Convergent evolution
B. Divergent evolution
C. Parallel evolution
D. Coevolution

Q.390 Darwin wrote a book named:
A. Philosophic Zoologique and natural selection
B. Survival of the fittest and natural selection
C. Special creation and inheritance of acquired characters
D. Origin of species by "Natural selection"

Q.391 The principle of __________ states that different fossil species always appear and disappear in the same order:
A. Faunal succession
B. Evolution
C. Natural selection
D. Co-evolution

Q.392 In Darwin's view, main cause of the diversification of finches was:
A. Mutation
B. Genetic drift
C. Geographical isolation
D. Competition

Q.393 Analogous organs have:
A. Similar anatomy
B. Similar physiology
C. Similar morphology
D. Similar structure

Q.394 Whale and shark will have more differences between their DNA and amino acid sequences than elephant and whale that means:
A. Shark and whale have common ancestors
B. Elephant and whale had a common ancestor
C. Shark and whale had a common ancestor very long time ago
D. Elephant and whale had a common ancestor very long time ago

Q.395 Following are the evidences of evolutionary relationship among species from molecular biology, EXCEPT:
A. DNA and proteins
B. Genes and gene products
C. Bone number and bone sequence
D. Nucleotide sequence and amino acid sequence

Q.396 Which of the following is considered to be a human vestigial structure?
A. Appendix B. External ear
C. Eye lids D. Eye burrows

Q.397 Homology is contrasted with:
A. Analogy B. Physiology
C. Anatomy D. Palaeontology

Q.398 Pick up the demerit of Lamarck's theory of evolution:
A. Acquired characters can be inherited B. Organs used more may increase in size
C. Acquired characters cannot be inherited D. Organs not used may deteriorate

Q.399 Neo-Darwinism is also known as:
A. Survival of the fittest B. Descent with modification
C. Modern evolutionary synthesis D. The concept of faunal succession

Q.400 A common_______ brings evidence that all life is related:
A. Mode of locomotion B. Skeletal framework
C. Mode of reproduction D. Genetic code

Q.401 Which one of the following describes correctly the homologous structures?
A. Organs with anatomical dissimilarities, but performing same function
B. Organs that have no function now, but had an important function in ancestors
C. Organs with anatomical similarities, but performing different functions
D. Organs appearing only in embryonic stage and disappearing later in the adult

Q.402 Which of the following are homologous organs?
A. Wings of bird and wings of locust B. Wings of bird and pectoral fins offish
C. Wings of bat and wings of butterfly D. Legs of frog and legs of cockroach

Q.403 Forelimbs of vertebrates represent:
A. Convergent evolution B. Divergent evolution
C. Parallel evolution D. Coevolution

Q.404 Cytochrome C, as a respiratory protein is found in all:
A. Living beings B. Anaerobic species
C. Aerobic species D. Microorganisms

Q.405 Evolutionists believe that first living being on earth belong to a group of:
A. Eukaryotes B. Plants
C. Protists D. Prokaryotes

Q.406 The early prokaryotes were:
A. Chemosynthetic autotrophs B. Photosynthetic autotrophs
C. Ingestive heterotrophs D. Absorptive heterotrophs

Q.407 The primitive earth's environment had very little nutrients that would have limited early life, so as a solution:
A. Chemosynthetic habit was evolved B. Photosynthetic habit was evolved
C. Absorptive habit was evolved D. Ingestive habit was evolved

Q.408 The analogous organs differ in following features, EXCEPT:
A. Anatomy B. Origin
C. Function D. Development

Q.409 First photosynthetic organism of nature:
A. Used water as a source of oxygen
B. Used water as a source of hydrogen
C. Used hydrogen sulphide as a source of oxygen
D. Used hydrogen sulphide as a source of hydrogen

Q.410 Natural selection is based on the:
A. Struggle for existence B. Random mating
C. Descent with modification D. Survival of the fittest

Q.411 Study of ancient life is mostly based on:
A. Molecular biology B. Paleontology
C. Mutation D. Evolution

Q.412 The major feature of Galapagos finches noticed by Darwin was:
A. Beak color B. Body coloration
C. Length of tail feathers D. Beak shape

Q.413 Decent with modification results in:
A. Overproduction B. Variation
C. Struggle for existence D. Survival of the fittest

Q.414 Palaeontology lies on the boundary between:
A. Biology and geology
B. Genetics and geology
C. Biology and astronomy
D. Genetics and astronomy

Q.415 Wings of butterfly and flying lizard have:
A. Same structures and same functions
B. Same structures and different functions
C. Different structures and same functions
D. Different structures and different functions

Q.416 Which of the following structures is homologus to the wing of a bird?
A. Flipper of whale
B. Hindlimbs of rabbit
C. Wings of moth
D. Dorsal fin of shark

Q.417 The key mechanism of evolution is:
A. Natural selection
B. Lamarckism
C. Inheritance of acquired character
D. Artificial selection

Q.418 ___________ hypothesized that organism evolved through the inheritance of acquired characteristics?
A. Lamarck
B. Darwin
C. Linnaeus
D. Aristotle

Q.419 The idea of inheritance of acquired characteristics is also called as:
A. Succession
B. Soft inheritance
C. Natural selection
D. Hard inheritance

Q.420 Pick up the correct combination:
A. George Cuvier : Inheritance of acquired characteristics
B. Charles Darwin : Origin of species by natural selection
C. Jean Baptiste de Lamarck : Catastrophism
D. De Varies : Natural selection

EVOLUTION
MCQs FROM PMC PRACTICE PAPER

Concepts of evolution

Q.421 The process that has transformed life on earth from its earliest forms to vast diversity is?
A. Mutation
B. Evolution
C. Migration
D. Genetic drift

Q.422 Concept of evolution was first presented by which of the following scientists?
A. Lamarck
B. Aristotle
C. Wallace
D. Darwin

Q.423 Earliest life form on earth is:
A. Virion
B. Viroid
C. Prion
D. None

Q.424 During Aristotle time, it was thought that:
A. Organisms ranged from simple to complex
B. One type of organism give rise to another type of organism
C. Both A and B
D. All living things specially created by nature

Q.425 Methanopyrus kandleri is an organism which lives in a hydrogen-carbon dioxide environment, and was first discovered in a hydrothermal vent where temperatures reached 230°F. What sort of organism is this?
A. Protist
B. Cyanobacteria
C. Archaea
D. Bacteria

Q.426 Flagella might have arisen through the ingestion of which of the following?
A. Cyanobacteria
B. Chlamydomonas
C. Paramecium
D. Spirochetes

Q.427 Carolus Linnaeus was believer of which of the following?
A. Special creation
B. Catastrophism
C. Natural selection
D. Inheritance of acquired characters

Q.428 Which of the following is not an example of evidence supporting the endosymbiotic theory?
A. Mitochondria and other plastids multiply by binary fission
B. Mitochondria contain their own DNA, which is a single circular chromosome
C. Mitochondria have their own ribosomes, which are 70s
D. None of these

Q.429 Two populations of the same species over time grow distant from one another. At what point will these two populations be considered different species?

A. When the populations begin to eat different foods
B. When there is a physical barrier, such as a river
C. When the two populations have not been in contact with one another for two hundred years
D. When they are no longer able to interbreed

Q.430 Which scientist does not match his achievements in the following options?

A. Lamarck published his theory of evolution
B. Lyell published principles of geology
C. Malthus published essay on principle of population
D. Cuvier published papers on inheritance

Q.431 The process by which different kinds of living organism are believed to have developed from earlier forms during the history of the earth:

A. Evolution
B. Development
C. Growth
D. None of the above

Q.432 He explained earth's history by catastrophism:

A. Cuvier
B. Lyell
C. Malthus
D. Lamarck

Q.433 Eukaryotes evolved by prokaryotes through:

A. Commensalism
B. Symbiosis
C. Predation
D. All of the above

Q.434 Who wrote an essay on population?

A. Malthus
B. Darwin
C. Mendel
D. Wallace

Q.435 Lamarck was in-charge of the Natural History Museum in:

A. North America
B. Paris
C. England
D. Wales

Inheritance of acquired characteristics

Q.436 Which condition can be explained by Lamarckism?

A. How giraffes got their long neck
B. How humans lost their tail
C. How humans became bipedal
D. All of these

Q.437 Which of the following scientists hypothesized that organisms can pass down acquired traits during their lifetimes?

A. Lamarck
B. Linnaeus
C. Darwin
D. Mendel

Q.438 Lamarck's ideas on biological evolution contained correct and incorrect notions. Which of his ideas is correct?

A. Acquired traits can be passed on to offspring
B. Living forms become perfect with time
C. Nervous fluids are passed on from generation to generation
D. Evolution is related to changes in adaptation to the environment

Q.439 The idea of inheritance of acquired characteristics was given by:

A. Lamarck
B. Darwin
C. Aristotle
D. Lyell

Q.440 What are parts of Lamarck's theory of evolution?

A. Individuals lose traits that they don't need
B. Acquired characteristics are heritable
C. Individuals gain characteristics they need
D. All of these

Q.441 Which of the following are important points of Lamarck's theory?

A. Use and disuse of organs
B. Inheritance of acquired characters
C. Natural selection
D. Both A and B

Q.442 Which scientists gave postulate that giraffes have long necks because they wanted to eat the leaves of tall trees?

A. Watson and Crick
B. Lamarck
C. Darwin
D. All of these

Q.443 Who hypothesized that organisms evolved through inheritance of acquired characters?

A. Darwin
B. Hutton
C. Malthus
D. Lamarck

SKN

Q.444 Which of the following can be described by Lamarckism?
A. How giraffe got their long neck?
B. How humans lost their tails?
C. How humans became bipedal?
D. All of these

Q.445 Use and disuse organ theory was proposed by:
A. Lamarck
B. Darwin
C. Wallace
D. TH Morgan

Darwinism

Q.446 Natural selection can amplify or diminish variations that are?
A. Heritable
B. Non heritable
C. Both a and b
D. Acquired

Q.447 Who developed a theory of natural selection essentially identical to Darwin's?
A. Hardy-Weinberg
B. Malthus
C. Lamarck
D. Alfred Wallace

Q.448 Darwin was greatly influenced by:
A. Essay on population by Malthus
B. Lamarck's theory
C. L-Miller's evidence for origin of life
D. Mendel's paper on inheritance

Q.449 Darwin's theory mainly focuses on:
A. Origin of life
B. How organs extinct
C. How new species arise
D. How organisms form

Q.450 Which theory tells about adaptation:
A. Darwin's natural selection
B. Lamarck's theory
C. Hardy
D. Weinberg's principle

Q.451 Island present near South American cost line:
A. Maldives
B. Madagascar
C. Galapagos
D. New Zealand

Q.452 Darwin returned to great Britain in:
A. 1831
B. 1855
C. 1836
D. 1841

Q.453 Natural selection was the silent feature of which statement:
A. Lamarck
B. Darwin
C. Aristotle
D. Wallace

Q.454 Darwin collected how many types of finches?
A. 12
B. 13
C. 14
D. 15

Darwin's theory evolution

Q.455 Darwin's Theory of evolution by natural selection is based on all of the following postulates except:
A. Some individuals are more successful in surviving and reproduction than others
B. Individuals within a population are variable
C. The survival and reproduction of individuals is not random
D. The survival and reproduction of individuals is random

Q.456 Darwin described his theory of natural selection as which of the following?
A. Punctuated equilibrium
B. Survival of the fittest
C. Inheritance of acquired characteristics
D. Descent with modification

Q.457 Who developed a theory of natural selection essentially identical to Darwin's?
A. Hardy-Weinberg
B. Malthus
C. Lamarck
D. Allred Wallace

Q.458 Darwin gave his theory of evolution in:
A. 1859
B. 1822
C. 1884
D. 1913

Q.459 Galapagos finches indicated:
A. Seasonal migration
B. Immigration
C. Allopatric speciation
D. Parapatric speciation

Q.460 During which of the following levels of biological organization can natural selection occur?
A. Gene
B. Individual
C. Group
D. All

Q.461 Which of the following would best determine the fitness of an organism?
A. The number of offspring produced by the organism. X
B. How much food the organism consumes in its lifetime
C. How large the organism grows
D. The number of offspring produced by the organism's own offspring

SKN

Q.462 Which organism would be considered the most biologically fit?

A. Lives 45 years and produces 3 offspring
B. Lives 70 years and produces no offspring
C. Lives 27 years and produces 1 offspring
D. Lives 36 years and produces 6 offspring

Q.463 The book name in which Darwin published the theory of evolution:

A. The origin of species by natural selection
B. The origin of species
C. The evolution of species
D. The evolution of species by means of natural selection

Q.464 What is the definition of "fitness" in terms of evolution?

A. The organism's ability to attain resources while in competition with other organisms of its species
B. The organism's ability to attract the most mates
C. The organism's health
D. The ability of an organism to contribute its genes to future generations

Q.465 The ability to pass on genes is defined as which of the following?

A. Differential reproduction B. Fitness
C. Evolution D. Natural selection

Q.466 Darwin' theory was based on:

A. Mutation B. Migration
C. Natural selection D. None of the above

Q.467 The beats definition of natural selection is:

A. Survival of the fittest
B. Most fit individuals adapt to their environment better than less fit individuals
C. Those who eat better are healthier and love longer are most fit within a population
D. Preservation of traits leads to increase survival and reproduction

Q.468 Darwin's theory can be named as:

A. Classical theory B. Advanced theory
C. Neo-Darwinism D. Theory of special creation

Q.469 Specifics of natural selection are:

A. Regional and permanent B. Local and constant
C. Regional and temporary D. Both A and B

Neo-Darwinism's

Q.470 Neo-Darwinism has integrated discoveries and ideas from:

A. Genetics B. Paleontology
C. Taxonomy D. All of these

Q.471 Neo-Darwinism came on to surface during:

A. 1930's B. 1940's
C. 1920's D. 1950's

Evidence of evolution

Q.472 Homology means:

A. Similarity in characteristics resulting from common ancestors
B. Similarity in function from acquired characters
C. Study of similar organs but with different functions
D. Study of similar organs but with different functions

Q.473 If two species have similar proteins and genes it means:

A. They have same organs. B. They have similar appearance
C. They have common ancestors D. All of above

Q.474 Which of the following is not an evidence for evolution?

A. Fossil record B. Common ancestor organisms
C. Vestigial structures D. None of these

Q.475 Most of the fossils are found in which of the following?

A. Metamorphic rocks B. Soil
C. Volcanic mountains D. Sedimentary rocks

Q.476 Structures that were once functional in the past but no longer serve a purpose due to evolutionary adaptations and physiological changes are referred to as?

A. Vestigial B. Analogous structures
C. Homologous structures D. None of these

Q.477 Which type of evolution is represented by analogous organs?
A. Divergent evolution
B. Straight evolution
C. Zig-zag evolution
D. Convergent evolution

Q.478 It is not a vestigial organ in humans:
A. Appendix
B. Coccyx
C. Both A and B
D. None of the above

Q.479 Homologous organs show similarity in:
A. Shape
B. Origin
C. Function
D. Size

Q.480 Which of the following is ancient fossil fuel?
A. Fish
B. Reptile
C. Bird
D. Amphibian

Q.481 Embryo of a turtle, mouse and human show:
A. Comparative embryology
B. Distinct differences
C. Vestigial organs
D. Analogous structure

Q.482 The structures of the front flipper of a whale and the forearm of a wolf have similar bone structure and derive from a common ancestor. This is an example of which of the following?
A. Convergent evolution
B. Analogous structures
C. Homologous structures
D. Bottleneck effect

Q.483 Example of convergent evolution is:
A. Forelimbs of man and bat
B. Wings of birds and insects
C. Darwin's finches
D. All

Q.484 Study of fossils is called:
A. Mammalogy
B. Palaeontology
C. Herpetology
D. Ornithology

Q.485 Which of the following organs serve no apparent purpose?
A. Non vestigial organs
B. Homologous organs
C. Analogous organs
D. Vestigial organs

Q.486 The wings of a bird and the wings of a beetle are considered?
A. Taxonomic
B. Phylogenetic
C. Homologous
D. Analogous

Q.487 Which statement is incorrect?
A. Homologous organs are functionally different but structurally alike
B. Examples of homologous structures are of cat, flipper of whale
C. Examples of analogous structures are wings of bats, birds and insects
D. Analogous organs are functionally different but structurally alike

Q.488 In humans gill pouches have evolved into which of the following organs?
A. Nose
B. Ear
C. Pharynx
D. Eustachian tubes

Q.489 Which of the following is not an evidence for evolution?
A. Fossil record
B. Vestigial structures
C. Common ancestor organisms
D. None of these

Out of the Syllabus

Q.490 Mating with non-relatives is known as?
A. Inbreeding
B. Outbreeding
C. Breeding
D. None of these

Q.491 A population of birds encounters a dramatic event that results in a severe decrease in population size. As a result of the newly-decreased population, what type of genetic drift does this population now exhibit?
A. Artificial selection
B. Founder effect
C. Bottleneck effect
D. both a and b

Q.492 When resources get scarce, the population growth?
A. Becomes fast
B. Slows down
C. Remains same
D. None of these

Q.493 Which statement best describes the Hardy-Weinberg principle?
A. Recessive alleles eventually disappear in large populations
B. Expected frequencies of alleles are impossible to predict mathematically
C. Dominant alleles become more prevalent in 1aarge populations
D. When there is a large population, the mechanism of inheritance does not change allele frequencies.

Q.494 Adaptation of traits to better fill a niche is known as which of the following?
A. Polymorphism
B. Gene linkage
C. Specialization
D. Replication

Q.495 Which of the following may cause loss of alleles from a gene pool?
A. Interbreeding
B. Mutation
C. Migration
D. None

Q.496 As long as two species occupy different niches, there is:
A. Competition
B. No competition
C. Gene linkage
D. Polymorphism

Q.497 Two species can avoid competition and better use the environment's resources by occupying different?
A. Adaptations
B. Polymorphism
C. Niches
D. Specialization

Q.498 According to Hardy-Weinberg theorem, frequencies of alleles and genotypes in a population's gene pool remain?
A. Mobile in gene pool
B. Constant
C. Stationary in gene pool
D. Constant unless acted upon by agents other than sexual recombination

Q.499 Bottleneck increases the effect of which of the following:
A. Genetic linkage
B. Genetic expression
C. Genetic diversity
D. Gene pool

Q.500 Which of the following conditions is not required to be true for a population in Hardy-Weinberg equilibrium?
A. Random mutations
B. Large population
C. No natural selection
D. Random mating

Q.501 Population growth is checked by which of the following?
A. No competition
B. No polymorphism
C. Polymorphism
D. Competition

Q.502 Primordial soup is a set of hypothetical conditions on ancient earth first proposed by?
A. Dmitri Ivanovsky
B. Dmitry Anuchin
C. Nikolay Shatsky
D. Alexander Oparin

Q.503 The ultimate source of all the change is?
A. Migration
B. Mutation
C. Genetic drift
D. Selection

Q.504 The frequency of allele if it is evolutionary successful is?
A. Increased
B. Decreased
C. No change
D. None of these

Q.505 When two or more clearly different phenotypes exists in same population of species, the phenomenon is called?
A. Replication
B. Polymorphism
C. Gene linkage
D. Gene expression

Q.506 Mating between relatives is called which of the following?
A. Inbreeding
B. Ex breeding
C. Breeding
D. Outbreeding

Q.507 The selection for a trait on one extreme is called which of the following?
A. Natural selection
B. Stabilizing selection
C. Directional selection
D. All of these

SKN

1	D	51	A	101	D	151	D	201	C	251	B	301	C	351	C	401	C	451	C
2	B	52	C	102	C	152	A	202	A	252	D	302	A	352	C	402	B	452	C
3	B	53	A	103	C	153	D	203	A	253	C	303	B	353	D	403	B	453	B
4	C	54	C	104	D	154	C	204	E	254	B	304	B	354	C	404	C	454	C
5	D	55	B	105	C	155	D	205	C	255	D	305	C	355	C	405	D	455	D
6	B	56	A	106	A	156	B	206	D	256	B	306	C	356	C	406	D	456	D
7	D	57	C	107	C	157	B	207	D	257	C	307	B	357	D	407	B	457	D
8	B	58	A	108	B	158	C	208	D	258	D	308	A	358	D	408	C	458	A
9	A	59	B	109	B	159	D	209	D	259	D	309	B	359	D	409	D	459	C
10	A	60	B	110	B	160	B	210	D	260	C	310	D	360	D	410	D	460	B
11	A	61	A	111	B	161	C	211	A	261	D	311	B	361	B	411	B	461	A
12	D	62	C	112	C	162	B	212	B	262	A	312	C	362	B	412	D	462	D
13	A	63	A	113	D	163	A	213	C	263	B	313	A	363	C	413	B	463	B
14	B	64	B	114	B	164	B	214	B	264	C	314	A	364	B	414	A	464	D
15	A	65	B	115	A	165	C	215	B	265	D	315	D	365	B	415	C	465	B
16	A	66	D	116	C	166	A	216	A	266	B	316	C	366	C	416	A	466	C
17	A	67	D	117	A	167	C	217	B	267	D	317	D	367	C	417	A	467	B
18	B	68	C	118	B	168	B	218	A	268	D	318	B	368	C	418	A	468	A
19	D	69	A	119	A	169	B	219	D	269	C	319	A	369	B	419	B	469	C
20	B	70	A	120	B	170	B	220	C	270	B	320	A	370	C	420	B	470	D
21	A	71	B	121	D	171	B	221	E	271	C	321	B	371	D	421	B	471	B
22	C	72	B	122	A	172	C	222	B	272	A	322	D	372	B	422	B	472	A
23	C	73	B	123	D	173	D	223	B	273	B	323	C	373	D	423	D	473	C
24	A	74	C	124	C	174	B	224	D	274	A	324	D	374	A	424	A	474	D
25	C	75	C	125	A	175	B	225	D	275	B	325	A	375	A	425	C	475	D
26	C	76	B	126	A	176	A	226	D	276	A	326	C	376	B	426	D	476	A
27	D	77	D	127	B	177	C	227	A	277	D	327	C	377	C	427	A	477	D
28	C	78	B	128	C	178	A	228	B	278	D	328	C	378	B	428	D	478	D
29	A	79	B	129	B	179	B	229	B	279	D	329	D	379	B	429	D	479	B
30	C	80	B	130	B	180	B	230	A	280	A	330	A	380	D	430	D	480	A
31	B	81	D	131	A	181	C	231	C	281	D	331	C	381	D	431	A	481	A
32	C	82	A	132	C	182	B	232	E	282	D	332	A	382	D	432	A	482	C
33	C	83	C	133	A	183	C	233	A	283	C	333	C	383	B	433	B	483	B
34	C	84	C	134	D	184	C	234	B	284	A	334	B	384	C	434	A	484	B
35	C	85	A	135	D	185	D	235	C	285	B	335	A	385	A	435	B	485	D
36	C	86	A	136	A	186	C	236	D	286	C	336	D	386	A	436	A	486	D
37	B	87	A	137	B	187	D	237	C	287	C	337	A	387	B	437	A	487	D
38	A	88	B	138	C	188	D	238	A	288	C	338	C	388	B	438	D	488	D
39	B	89	B	139	D	189	B	239	A	289	C	339	C	389	B	439	A	489	D
40	C	90	C	140	D	190	B	240	D	290	C	340	B	390	D	440	D	490	B
41	C	91	C	141	B	191	C	241	B	291	A	341	D	391	A	441	D	491	B
42	A	92	C	142	B	192	A	242	A	292	D	342	B	392	C	442	B	492	B
43	D	93	D	143	D	193	B	243	B	293	C	343	A	393	B	443	D	493	D
44	C	94	A	144	A	194	B	244	A	294	C	344	C	394	C	444	D	494	C
45	A	95	A	145	D	195	B	245	B	295	D	345	D	395	C	445	A	495	C
46	B	96	A	146	D	196	C	246	D	296	A	346	B	396	A	446	A	496	B
47	C	97	B	147	B	197	C	247	C	297	A	347	C	397	A	447	D	497	C
48	D	98	A	148	B	198	C	248	B	298	C	348	A	398	A	448	A	498	D
49	A	99	B	149	D	199	C	249	C	299	B	349	A	399	C	449	C	499	C
50	B	100	B	150	D	200	C	250	A	300	D	350	B	400	D	450	A	500	A
501	D	502	D	503	B	504	A	505	B	506	A	507	D	508		509		510	